

REMARKS

In the outstanding office action, Claims 1-2 stand rejected under 35 USC 102 as being anticipated by Howland et al. ("Howland"), and Claims 1, 4, 6, 8, 10-11, 32-33 stand rejected under 35 USC 103 as being unpatentable over Hardwick et al. ("Hardwick") in view of Howland and Chatwin et al. ("Chatwin"), and Claims 7-9, 12-28 and 35-37 stand rejected under 35 USC as being unpatentable over Hardwick in view of Howland and Chatwin.

Applicants note that Claims 15-28 and 29-31 were previously withdrawn as being directed to non-elected inventions, in the office action mailed December 12, 2001. Applicants assume that the restriction requirement as to Claims 15-28 has been withdrawn, since the outstanding office action has examined these claims on the merits.

Claims Rejections -35 USC 102

Claims 1 and 2 stand rejected as being anticipated by Howland. This ground of rejection is mooted by cancellation of Claim 1, and amendment of Claim 2 to depend from Claim 13.

Claims Rejections - 35 USC 103

Claims 1, 4, 6, 8, 10-11, 32-33 stand rejected under 35 USC 103 as being unpatentable over Hardwick et al. ("Hardwick") in view of Howland and Chatwin et al. ("Chatwin"). This ground of rejection has been mooted by cancellation of Claims 1 and 33, and amendment of Claims 4, 6, 8, 10-11 to depend from Claim 13.

Claims 7-9, 12-28 and 35-37 stand rejected under 35 USC as being unpatentable over Hardwick in view of Howland and Chatwin.

This rejection is respectfully traversed on the grounds that a prima facie case of obviousness has not been established, and the applied references do not teach or suggest the claimed invention.

Claims 12-14 have been amended to place these claims in independent form. Each of Claims 12-15 and 35-37 includes in combination a print medium. These claims further recite:

means for preventing interference between a first fluorescing signal emitted by the first indicia and a second fluorescing signal emitted by the second indicia during a detection process for reading information from said first indicia or said second indicia, in which detection process the substrate structure is illuminated by illumination energy of a predetermined wavelength or wavelength range which causes said fluorescent material to fluoresce, said means including a reflective layer structure positioned between the first indicia and the second indicia, said reflective layer structure having sufficient thickness and opaqueness to prevent passage therethrough of said first fluorescing signal and said second fluorescing signal and to reflect said illumination energy (Claim 12)

means for preventing interference between a first fluorescing signal emitted by the first indicia and a second fluorescing signal emitted by the second indicia during a detection process for reading information from said first indicia or said second indicia, in which detection process the substrate structure is illuminated by illumination energy of a predetermined wavelength or wavelength range which causes said fluorescent material to fluoresce, said means including a reflective layer structure positioned between the first indicia and the second indicia, said reflective layer structure having sufficient thickness and opaqueness to prevent passage therethrough of said first fluorescing signal and said second fluorescing signal and to reflect said illumination energy (Claim 13)

means for preventing interference between a first fluorescing signal emitted by the first indicia and a second fluorescing signal emitted by the second indicia during a detection process for reading information from said first indicia or said second indicia, in which detection process the substrate structure is illuminated by illumination energy of a predetermined wavelength or wavelength range which causes said fluorescent material to fluoresce, said means including a reflective layer structure positioned between the first indicia and the second indicia, said reflective layer structure having sufficient thickness and opaqueness to prevent passage therethrough of said first fluorescing signal and said second fluorescing signal and to reflect said illumination energy
(Claim 14)

a reflective barrier structure for preventing interference between a first fluorescing signal emitted by the first indicia and a second fluorescing signal emitted by the second indicia during a detection process in which the substrate is illuminated by illumination energy of a predetermined wavelength or wavelength range which causes said fluorescent material to fluoresce, said reflective barrier structure of sufficient opacity and reflectiveness to prevent passage therethrough of said first fluorescing signal and said second fluorescing signal and to reflect said illumination energy (Claim 15)

a thin metal layer positioned between the first indicia and the second indicia for blocking passage therethrough of a first fluorescing signal emitted by the first indicia and a second fluorescing signal emitted by the second indicia during a detection process for reading information from said first indicia or said second indicia wherein the substrate structure is illuminated by illumination energy of a predetermined wavelength or wavelength range which causes said fluorescent material to fluoresce, said thin metal layer of sufficient

opacity and reflectiveness to prevent passage therethrough of said first fluorescing signal and said second fluorescing signal and to reflect said illumination energy and thereby prevent interference between the first fluorescing signal and the second fluorescing signal and degradation of said detection process (Claim 35)

a reflective layer positioned between the first indicia and the second indicia for blocking passage therethrough of a first fluorescing signal emitted by the first indicia and a second fluorescing signal emitted by the second indicia during a detection process for reading information from said first indicia or said second indicia, wherein the substrate structure is illuminated by illumination energy of a predetermined wavelength or wavelength range which causes said fluorescent material to fluoresce, said reflective layer of sufficient opacity and reflectiveness to prevent passage therethrough of said first fluorescing signal and said second fluorescing signal and to reflect said illumination energy and thereby prevent interference between the first fluorescing signal and the second fluorescing signal and degradation of said detection process (Claim 36)

a reflective layer positioned between the first indicia and the second indicia for blocking passage therethrough of a first fluorescing signal emitted by the first indicia and a second fluorescing signal emitted by the second indicia during a detection process for reading information from said first indicia or said second indicia, wherein the substrate structure is illuminated by illumination energy of a predetermined wavelength or wavelength range which causes said fluorescent material to fluoresce, said reflective layer of sufficient opacity and reflectiveness to prevent passage therethrough of said first fluorescing signal and said second fluorescing signal and to reflect said illumination energy and thereby preventing interference between the first fluorescing signal and

the second fluorescing signal and degradation of said detection process
(Claim 37)

Applicants respectfully disagree with the recitation of the teachings of the references set out in the office action.

Hardwick is directed to banknote security devices, wherein inks are applied above and below a substrate. As the Examiner recognizes, Hardwick does not describe placing a reflective layer between the two ink indicia.

Howland is cited as allegedly showing a security device with first and second indicia with a metallized substrate in the middle, the substrate coated with a very thin film of aluminum (equivalent to thin metal foil layer of Claim 2), metal oxide or other reflective layer at col. 3, lines 23-33. There is no teaching or suggestion in Howland that the security device include a means for preventing interference or layer or barrier structure as recited in amended Claims 12-15 and 35-37. For this reason alone, a *prima facie* case of obviousness has not been established.

The Examiner further alleges that it would have been obvious to modify the banknote of Hardwick to include a metallized foil, or reflective layer as the substrate since Howland teaches metallizing a substrate to exhibit such properties as high reflectivity and also enable the second indicia to be viewed in transmitted light. Applicants respectfully disagree. There is no showing of any advantage to be achieved by adding the very thin metal layer of Howland to Hardwick. Moreover, even if the combination is made as urged by the Examiner, the claimed invention still does not result since the modified Hardwick device would not include a "means for preventing interference," or barrier or layer structure, as set out in the rejected claims. The cited passage of Howland does not describe a barrier or layer structure as recited in these claims, but a coating that is sufficiently transparent to enable the second indicia to be viewed in transmitted light.
(Howland at 3:31-33)

Chatwin is cited as showing a polyester material for the substrate. Because the reference is not cited as including the missing limitation of a "means for preventing interference" or barrier or layer structure, the combination of references fails to provide a *prima facie* case of obviousness.

Measuring a claimed invention against the standard established by 35 USC 103 requires the critical step of casting the mind back to the time of invention, to consider only the thinking of one of ordinary skill in the art, guided only by the prior art references and the then-accepted wisdom in the art. The case law of the Federal Circuit makes clear that the best defense against the subtle but powerful attraction of a hindsight-based obviousness analysis is rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references. Evidence of a suggestion, teaching or motivation may flow from the prior art references themselves, the knowledge of one of ordinary skill in the art, or in some cases, from the nature of the problem to be solved. The range of sources available, however, does not diminish the requirement for actual evidence. The showing of such actual evidence must be clear and particular. Broad conclusory statements regarding the teaching of multiple references, standing alone, are not evidence. The required showing of evidence should include particular factual findings. In re Dembiczak, 50 USPQ 2d 1614, 1617 (Fed.Cir. 1999).

Here, the rejection is the product of prohibited hindsight reconstruction, using applicants' specification as a blueprint to find an assortment of elements in different references. Because a *prima facie* case of obviousness has not been established, and the applied references do not teach or suggest the claimed invention, the rejection under Section 103 should be withdrawn.

CONCLUSION

The outstanding objections and rejections have been addressed, and the application is in condition for allowance. Such favorable reconsideration is solicited.

Respectfully submitted,



Larry K. Roberts
Registration No. 28,464

Dated: 2/26/09

Law Offices of Larry K. Roberts, Inc.
P.O. Box 8569
Newport Beach, CA 92658-8569
Telephone (949) 640-6200
Facsimile (949) 640-1206